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RESEARCH VISIBILITY. VOCATIONAL EDUCATION IS SERVICE--LEADERSHIP AND ADMINISTRATION.

BY- LAW, GORDON F.
AMERICAN VOCATIONAL ASSN., WASHINGTON, D.C.

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NINETEEN REVIEWS IN THIS ISSUE PERTAIN TO LEADERSHIP AND ADMINISTRATION, ONE OF THE MAJOR AREAS OF CONCERN IDENTIFIED BY THE PANEL OF CONSULTANTS ON VOCATIONAL EDUCATION. THEY ARE ORGANIZED BY TOPICS--(1) "LEADERSHIP TRAINING, WORKSHOPS, AND INSTITUTES" TREATS AN INTERDISCIPLINARY FORUM ON OCCUPATIONAL EDUCATION, A HOME ECONOMICS WORKSHOP, A DOCTORAL PROGRAM SYMPOSIUM, AND SIX LEADERSHIP DEVELOPMENT MEETINGS, (2) "COSTS AND BENEFITS OF VOCATIONAL EDUCATION" DISCUSSES WAGE DIFFERENCES, COST-BENEFIT ANALYSIS, AND COSTS AND RETURNS OF TECHNICAL EDUCATION, (3) "STATE ADMINISTRATION" DESCRIBES MICHIGAN'S LEADERSHIP PROGRAM, INSTRUMENTS USED IN STUDYING STATE AGENCIES, AND CRITERIA FOR SELF-ANALYSIS FOR VOCATIONAL EDUCATION, AND (4) "STUDIES OF GENERAL INTEREST TO ADMINISTRATORS" INCLUDES A POST-WAR EXAMINATION OF VOCATIONAL EDUCATION AND INTERGOVERNMENTAL FISCAL RELATIONS, SOCIAL FACTORS IN SLUMS, AND IMPLICATIONS OF VOCATIONAL EDUCATION FOR COMPANY PLANT SITE SELECTION. "PLAIN TALK," A CONTINUING COLUMN, DISCUSSES LEADERSHIP DEVELOPMENT EFFORTS IN VOCATIONAL EDUCATION AND TWO OF THE REVIEWED STUDIES. THE BIBLIOGRAPHY LISTS EIGHT RELATED STUDIES WHICH ARE IN PROCESS. THIS ARTICLE IS PUBLISHED IN THE "AMERICAN VOCATIONAL JOURNAL," VOLUME 43, NUMBER 4, APRIL 1968. (EM)

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# RESEARCH VISIBILITY

SYNTHESIS / APPLICATION / DISSEMINATION

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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"Research Visibility" is a research project of the American Vocational Association. The purpose is to give visibility to significant research: experimental, demonstration and pilot programs; upgrading institutes, seminars and workshops; and other leadership development activities for teachers, supervisors and administrators. The "Research Visibility" report synthesizes important projects which have been reviewed, selected and analyzed for their value to

## Vocational Education Is Service . . .

THE NATIONAL SHORTAGE of competent vocational education leaders is a serious problem, certainly one that deserves to receive more attention. Although the shortage is well known and frequently discussed, a genuine commitment to correct the situation has been pitifully weak. Only a few agencies have initiated the kind of extensive leadership training program that is commensurate with the requirements of the times. Except for some workshops and seminars, the U. S. Office of Education has done little.

Probably the most prestigious program of leadership training so far has been the three-year effort in New York State. More than 40 administrative interns have received a combination of graduate school instruction, a series of visits to outstanding vocational programs throughout the country and a period of internship. More details of this outstanding program are given in the "Plain Talk" section.

The 1962 report of the Panel of Consultants, *Education for a Changing World of Work*, gives a great deal of attention to leadership and administration. Stressing the importance of leadership to the educational process, the report has four recommendations:

1. An adequate staff for the administration and supervision of vocational education be maintained at the local, State and Federal levels of operation.

2. The Federal Government cooperate with State governments to develop programs for the selection and training of administrative and supervisory staff.

3. The general school administrator —the superintendent and secondary school principal—be involved in train-

## Leadership and Administration

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Dr. Gordon F. Law is editor of "Research Visibility." The organization for this department of the JOURNAL, the pattern for reporting and the writing represent his work.

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ing for leadership responsibility for vocational education.

4. Positions of leadership in vocational education at the local, state and federal levels provide responsibility, authority and salary sufficient to recruit and hold the best qualified persons in these positions.

The recently released publication, *The Bridge Between Man and His Work*, which contains the highlights and recommendations from the National Advisory Council on Vocational Education, 1968, reinforces the importance of leadership at every level.

On March 5, 1968, Chairman Martin Essex testified to the House Subcommittee on Vocational Education, that the opportunity for leadership in the Federal Division of Vocational Education was starved for funds and authority. Another Council member, Rupert Evans, dean of Education, University of Illinois, stated that there have been only three periods when numbers of vocational leaders were trained: (1) immediately following the passage of the Smith-Hughes Act; (2) during the war emergency in the 1940s; and (3) after passage of P.L. 88-210 in 1963. Evans reported that much more effort is needed, especially to prepare a new breed of young and aggressive leaders, able to face contemporary problems.

*The Bridge Between Man and His Work* has been prepared by the U. S. Department of Health, Education and Welfare, U. S. Office of Education. It is especially important as a source of direction for both national legislation and local initiative.

## TOPIC ONE: Leadership Training, Workshops and Institutes

### Interdisciplinary Forum

8:1 "SYMPOSIUM IN OCCUPATIONAL EDUCATION, MANPOWER AND ECONOMIC CHANGE IN THE UNITED STATES" BY MAYNARD BEMIS, PHI DELTA KAPPA, INC., BLOOMINGTON, IND. (PROJECT # 5-0159) 1966. ERIC # ED 010 127. MF $0.25 HC $1.40. 35 PAGES.

This interdisciplinary conference on education is described as an effort to provide leadership and direction to a series of questions relevant to educational research and practice. The symposium, bringing together sociologists, anthropologists and economists, generated fresh ideas and approaches to nationally important educational concerns. It was designed to be provocative and broad in scope, devoted to discovering insights into, rather than finding solutions for, educational problems.

The objectives of the symposium as a developmental project were stated as follows:

—To establish a competent forum for presenting issues and for provoking inquiry on problems of occupational research as these relate to education, manpower and economic chan.

—To examine the conceptual framework of fields of inquiry which may contribute jointly and simultaneously to research problems involving education, manpower and economic change.

—To identify specific problems which are barriers to translating knowledge into behavior in occupational education, in manpower programs and in educational programs designed to accelerate economic growth.

—To focus interest on an important educational problem and to invite the attention of educational researchers and educational practitioners to this problem.

—To prompt research projects and action programs in the various colleges and universities at which Phi Delta Kappa has local chapters.

The symposium was organized according to a pattern previously adopted by Phi Delta Kappa for the accomplishment of similar objectives. The preliminary steps involved acceptance of topics by the Legislative Body, endorsement of an action program by local chapters, organization of an advisory committee, and selection of a general chairman who was responsible for planning the symposium.

*Six Papers Presented*

The program consisted of the presentation of six major papers, which had previously been exchanged among participants and made available to 20 discussants. The papers were read to assembled audiences of approximately 50 to 100 people. Discussion was limited to co-participants and discussants. The six major speakers and the papers they each presented were:

*American Education in the Future* by Solon T. Kimball, Department of Anthropology, Teachers College, Columbia University.

*The Attention to Social Detail in an Economically Developed Society* by Fred L. Strodbeck, director, Social Psychology Laboratory, The University of Chicago.

*The Role of Government in Promoting Full Employment* by Arthur Ross, Bureau of Labor Statistics, U. S. Department of Labor.

*Manpower Needs, National Goals, and Educational Policy in the 1970's* by Leonard A. Lecht, director, National Goals Project, National Planning

Commission, Washington, D.C.

*The Contribution of Education to Economic Development* by Hector Correa, Wayne State University.

*Dimensions of the Present Era of Technological Change* by Gerhard Colm, chief economist, National Planning Commission, Washington, D. C.

### *Two Questions*

Although the report does not include transcripts of the six papers, there is a selective summary oriented around two questions. "What ideas from sociology, anthropology and economics were presented to the symposium, and what do they tell us about the social forces that will affect education in the next decade? Second, how can these ideas be used by educators and others to plan needed changes in education?"

Of the educational problems discussed in the selective summary, the school's general resistance to change was a paramount issue. Alluding to the traditional, community centered school organization, questions were raised as to whether this type of "educational establishment" could indeed meet the national, social and economic challenges, or whether other educational systems have to be found.

In view of poor federal-local relationships the summary recommended the need for greater national leadership to help schools cope with the oppressive problems of societal, cultural and economic change. Concerning the reorganization of the schools, the flexible pattern found in the university was offered as a possible alternative. It was suggested that the young field of administrative science had a body of principles which might be highly valuable to educators.

### *Economic Importance*

Focusing on the inadequate preparation of students for the world of work, the summary emphasized the importance of education to economic growth. That is, the vitality of the economy depends on the training of youth for occupations. There were also a number of expressions of concern about unemployment, poverty and youth with special needs.

It was reported that a complete review of the symposium and a bibliography devoted to education, manpower and economic change are being prepared for publication by Phi Delta Kappa.

## Home Economics Workshop

8:2 "REPORT OF WORKSHOP FOR ADMINISTRATORS OF VOCATIONAL HOME ECONOMICS TRAINING PROGRAMS IN WAGE-EARNING OCCUPATIONS" BY ANN BUNTIN. TEXAS TECHNOLOGICAL COLLEGE, LUBBOCK, TEX. (PROJECT # 5-0180) 1965. ERIC # ED 003 098. MF $0.25 HC $1.56. 39 PAGES.

The major objective of this workshop was to provide an opportunity for home economists responsible for administrative or consultative services in vocational education to develop their knowledge and understanding in the vocational aspects of home economics education. Particular emphasis on the training program was focused on the needs of disadvantaged youth.

Participants were selected on the basis of four criteria:

—Professional backgrounds in home economics or in closely related disciplines.

—Current involvement in vocational programs at area or state levels or in metropolitan or large communities.

—Assigned administrative or supervisory responsibilities.

—Eligibility for admission to graduate school.

### *Thirty-Three Enrolled*

The three-week workshop, preceded by a concentrated planning and organization period by Texas Tech staff members, had a total enrollment of 33 persons from six states. Eight members of the group had supervisory positions in city or state education departments, and six had college positions. Other participants were reported to be expecting leadership responsibilities for training programs in wage-earning occupations.

In the first week of the workshop, emphasis was focused on the following five objectives:

1. Greater understanding of the provisions of the Vocational Education Act of 1963 as they affect preparation for occupational competency in jobs requiring home economics knowledge and skills, including food and nutrition, clothing and textiles, child development, family relations and home management.

2. Increased interest in and ability to assume leadership roles for initiating and developing programs for vocational education which prepare for occupational competency in home economics related occupations.

3. Increased understanding of the behavioral range of children who come from disadvantaged homes and communities.

4. Increased understanding of the values and needs of socially disadvantaged children and their families.

5. Improved skills in communicating with persons responsible for program plannng and personnel services, as well as with agencies, businesses and industries which will employ workers trained for occupations involving home economics knowledge and skills.

Several different methods were employed during the workshop. There were presentations related to such topics as the Vocational Education Act of 1963, characteristics of programs which prepare for employment and how they differ from those which prepare only for homemaking, and work with school administrators in program planning and development. Panel discussions were held on the interpretation and implementation of state policies of Texas, Tennessee, Georgia, and California. Reports on occupational programs, especially for underprivileged, were given. A tape, "The Challenge: New Careers for the Poor," was viewed and discussed. Participants were also involved in individual reading and study.

### *New Objectives Stressed*

During the second week, problems raised in the initial week were explored further. In addition, the following five new objectives were emphasized:

—A more thorough knowledge of and the ability to use the series of guides developed by the U. S. Office of Education for Home and Community Service Occupations as bases for local or area program development.

—Awareness of possibilities for cooperation among the various vocational educational services in planning and implementing sound training programs for competency in home economics related occupations.

—Understanding of possible ways of using team teaching involving other disciplines in the training of youths and adults for occupational competency in the home economics related occupations.

—Knowledge of current experimental programs and pilot studies for

preparation for competency in home economics related occupations.

—Knowledge of current research which has implications for developing effective home economics education programs for wage earning.

During the third week, each person enrolled was engaged in an independent study. These studies involved the development of plans toward initiating or implementing programs to prepare for wage-earning occupations in home economics. Among the topics selected were several curriculum development projects, plans for organization and operation of a child care center, an exploration of a hierarchy of jobs and job analyses which would use home economics knowledge and skills, and the preparation of a bibliography.

The report contains a summary of evaluations, together with a copy of the evaluation sheet used. A bibliography lists more than 100 titles of books, tapes, films, and periodicals.

### Doctoral Program Symposium

8:3 "THE ADVANCED DEGREE AND VOCATIONAL-TECHNICAL EDUCATION LEADERSHIP (A SYMPOSIUM)" BY CARL SCHAEFER. RUTGERS—THE STATE UNIVERSITY, NEW BRUNSWICK, N. J. (PROJECT # 5-8464) 1966. ERIC # ED 010 015. MF $0.25 HC $2.40. 60 PAGES.

The three-day leadership symposium at Rutgers was devoted to the development of doctoral level programs in vocational-technical education. The format included the presentation of eight working papers, counterpart reactions and roundtable discussions. There were 48 participants.

Each author of a working paper was asked to relate the contributions his discipline could make to the preparation of future vocational leaders. Specifically, each reacted to the following questions:

—What will be the challenge of preparing youth and adults for the world of work this next decade?

—How does your discipline relate to the problem of man, education and work?

—What contributions can your discipline make to the development of a new breed of vocational-technical educator in terms of discrete content, experiences and techniques?

—How can leadership, and especially those who may be directly responsible for administering vocational and technical programs (both at the secondary and post-secondary levels), be best prepared?

—What role, if any, can an internship play?

—Should graduates of such a program be research oriented?

The 15 authors of the working and reaction papers are distinguished, nationally recognized figures in their respective disciplines. Transcripts of their presentations, the main content of this report, are important additions to the literature of vocational education. Although most of the papers are theoretical and not closely related to the specific aspects of preparing vocational administrators, they contain timely and often stimulating ideas.

Donald Super of Teachers College, Columbia University, identifies three major challenges facing vocational education in the decade ahead. Super recognizes as challenges: (a) the demand for increasing numbers and percentages of skilled and technical workers; (b) the education for work of those who become semiskilled workers, and (c) the avocational education for those in whose lives work is likely to play a declining role temporally and psychologically. Super's commentary includes the recommendation that vocational education must provide for changes in jobs and aspirations, by combining basic academic skills with vocational content.

The comments of Carl Schaefer and Byrl Shoemaker, Ohio director of Vocational Education, deal directly with the doctoral program in vocational education administration. Whereas Schaefer stresses the need for liberalizing the training process, Shoemaker appears to espouse a more traditional approach by recommending a graduate program which is based on analysis of the vocational administrator's duties and responsibilities.

Schaefer's paper, "A New Breed of Leadership for Vocational-Technical Education," alludes to the factors which should be considered in developing a doctoral program in administration and research for vocational-technical education. Citing the need for a more liberally educated practitioner, Schaefer establishes a parallel between the vocationally trained "specialist" and his counterpart in industrial management. He reports that a number of industrial management institutes are now giving considerable attention to instruction in the humanities, as top management searches for more liberally educated executives. "It could be well hypothesized that a similar liberalizing of 'executive type' vocational and technical educators should take place in the advanced degree being proposed at Rutgers."

Shoemaker stresses the value of practical knowledge and experience. Referring to the challenge of preparing youth and adults for the world of work, he recommends a graduate program that is firmly rooted in principles and practices based on experience. The qualities Shoemaker would like to see in the graduates of a doctoral program in vocational education are:

—A depth of understanding of the principles and practices and modern trends in vocational education.

—An understanding of the principles in the related disciplines which will enable them to both develop and implement changes needed in the vocational programs and to adjust to the rapid changes in business and industry and our modern society.

—Leadership skills needed to work effectively with teachers, students, school administrators, business and industry, and the public.

—An ability to be a good consumer of research.

—An understanding of employment practices and trends both within the state and within the nation.

—An understanding of legislative patterns and trends and principles of laws.

—Experiences in coordinating the knowledge and skills identified above to work effectively on the practical problems of the development and improvement of vocational education programs for youth and adults.

The commentary by Burr Coe, superintendent of the Middlesex County, N. J., Vocational Schools, was in close agreement with Shoemaker's recommendations. Among his personal convictions related to vocational education and school administration are statements that:

—"The doctorate in vocational education should be a practitioner's degree rather than a scholar's degree; hence, only persons with experience in vocational education should be accepted as candidates."

—"Students in doctoral programs will learn more and profit most from contact with faculty members with successful vocational education experience than from theoreticians. The job analysis approach can be applied to training school administrators as well as skilled workers."

## Leadership Consortium

8:4 "NATIONAL LEADERSHIP DEVELOPMENT INSTITUTES IN TECHNICAL EDUCATION" BY CALVIN J. COTRELL. THE OHIO STATE UNIVERSITY, COLUMBUS, OHIO. (PROJECT # 6-1888) 1967. ERIC # ED 011 932. MF $0.75 HC $6.32. 158 PAGES.

The need for a project to develop leaders in technical education is documented in *The Summary Report of Vocational and Technical Program Development*, U. S. Office of Education. This publication cites the millions of dollars being spent, the astronomical building programs under way, and the projections for expansion of present programs and staffs in technical education throughout the nation.

During the summer of 1965, Robert E. Taylor, director of The Center for Vocational and Technical Education, The Ohio State University, and Robert Knoebel, who at that time was director of the Technical Education Unit, USOE, met and discussed the potential role of the Center in meeting the leadership needs in technical education. As a result, a select group of vocational and technical educators was invited to a conference at the Center in August 1965 to explore means in the future development of technical education. The series of five two-week leadership development institutes reported here was a direct outcome of these preliminary deliberations.

### *Specific Objectives*

The specific objectives of the project were:

1. To provide a training program to improve program planning, development, implementation, and evaluation skills of present and prospective leaders in technical educaton.

2. To stimulate and strengthen the long-range interests of institutions of higher education in research and leadership development activities in technical education.

3. To provide evidence for the evaluation of two-week institutes as an administrative tool for accelerating the development of leadership for technical education.

4. To provide data for assessing the effectiveness of the consortium approach to a project wherein one institution coordinates the planning, funding, development of instructional materials, operation, and evaluation of a training program offered by several cooperating institutions.

The National Leadership Development Institutes in Technical Education project was organized as a consortium of the following institutions: Colorado State University, University of Florida, University of Illinois, Oklahoma State University, Rutgers—The State University of New Jersey, and The Center for Vocational and Technical Education, The Ohio State University.

The Center served as the coordinating agency for designing the program, obtaining funds, preparing the core of institute staff, recommending consultants, collecting, preparing and disseminating instructional materials, recruiting and selecting participants, evaluating the institutes, and preparing the final report.

Each of the five cooperating institutions sponsored one two-week institute with a pre-established leadership training program for 40 participants, thereby offering training for a total of 200 persons.

After wide advance circulation of information concerning the five institutes, mainly through State Directors Offices, the USOE, *Technical Education Yearbook*, and the Ohio State Centergram publication, 200 participants were selected from a pool of 403 applicants. Preference was given to state staff members, teacher educators and other candidates having high leadership responsibility or potential. Consideration was also given to maintaining balance and diversity in each of the institutes in terms of geographical mix, field of specialization, and nature of applicant's current position in vocational and technical education.

### *Project Activities*

Each of the institutes covered an agenda which included a 10-unit group of major topics, previously agreed upon by institute directors and by the planning committee. There was no prescribed order or method of presentation, allowing each institution to comply with its schedule of consultants and other local considerations. The 10 units of the topical outline are:

—The Leadership Role and Charge

—The Rationale and Need for Technical Education

—Description of the Technical Education Student

—Administrative Structure of Technical Education

—Program Patterns and Curriculum Development

—Facilities and Equipment for Technical Education

—Staffing Technical Education Programs

—Financing Technical Education

—Supervision of the In-Service Education Program

—Establishing Research and Development Needs

The project evaluation was both ob-

tional education needs in local communities of North Dakota.

The two-week workshop was comprised of nine major presentations, panel discussions and small group meetings. Following the summer session was a two-day tour of area vocational schools at Wahpeton, N.D., and in Alexandria and Staples, Minn.

The reactions and evaluations received from the 24 workshop participants are summarized in this report. Comments upon the area vocational facilities visited and the ways in which local programs may be initiated reveal that the authors were generally concerned with the need for expanding vocational education in North Dakota.

The real significance of the North Dakota report is that it illustrated that students may be disadvantaged by geographic location just as much as by physical or mental handicaps or socioeconomic status.

## TOPIC TWO: Costs and Benefits of Vocational Education

### Starting Wage Differences

8:11 "VOCATIONAL EDUCATION: A STUDY OF BENEFITS AND COSTS (A CASE STUDY OF WORCESTER, MASS.)" A. J. CORAZZINI. PRINCETON UNIVERSITY, PRINCETON, N.J. (PROJECT # 5-0172) 1966. ERIC # ED 010 296. MF $0.75 HC $5.32. 133 PAGES.

This case study of the Worcester, Mass., high school system was designed to present an evaluation of the economic benefits of the city's vocational schools to individual graduates and to the local community. The study compares the system's regular high schools with its vocational high schools, giving particular attention to the relative cost of the two types of education. A class of students at the vocational schools is traced through four years of training and subsequent placement in jobs after graduation.

The purpose of the study is contained in the statement that "the economic aspects of vocational education demand much closer examination and assessment than they have heretofore received, since federal grants to states for the expansion of vocational-technical education are made on the assumption that growth of these public training centers will help minimize unemployment and maximize economic growth within regions and within the country as a whole."

The economic returns of the Worcester investment in human capital were measured in three categories: (a) measurable returns to the individual; (b) measurable returns to society at large, and (c) nonmeasurable returns to the individual and to society.

The economic costs were defined as those resources, human and nonhuman, expended in the production of a given good or service, and their economic value was measured in a standard monetary unit of account. "Thus, computing the total resource costs of the vocational or any other educational program will mean computing the economic value of all resources expended in the production of the public good."

It was found that male vocational high school education was 1.4 times as expensive as regular high school education, and for girls 1.25 times as expensive. The empirical data revealed that, at least initially, vocational graduates earn slightly higher wages than untrained regular high school graduates. The difference in earnings was more pronounced in smaller firms.

It is stated that this study of starting wage differentials was limited to beginning wages of vocational graduates and regular high school graduates employed in the same trades. "Perhaps the vocational graduate should also be compared with the noncollege-bound high school graduate who was not employed in the same trade."

Another limitation of this study, one which could seriously flaw its validity as a true test of educational effectiveness, is the fact that no attempt was made to equate students on the bases of SES, ability, school achievement, and attitude toward school. Also, the factors that lie behind students' "decision" to attend a vocational school were not explored. Did home and family attitudes and pressures influence the decision? Are there socioeconomic differences between the school populations; how much do guidance policies and practices affect the direction students take?

As Kaufman stated in his analysis of costs and benefits, which is reported in this issue, "Corazzini and Taussig have not properly controlled for the socio-demographic factors which significantly affect the earnings of graduates. Therefore, their estimated earnings are *gross* in nature rather than *net*."

### Cost-Benefit Analysis

8:12 "AN ANALYSIS OF THE COMPARATIVE COSTS AND BENEFITS OF VOCATIONAL VERSUS ACADEMIC EDUCATION IN SECONDARY SCHOOLS" (PRELIMINARY REPORT) BY JACOB J. KAUFMAN. PENNSYLVANIA STATE UNIVERSITY, UNIVERSITY PARK, PA. (PROJECT # 5-1190) 1967. 156 PAGES.

It has often been said of vocational education that it is an investment in human resources, paying off in dividends to the individuals involved, the business and industrial community, and to society at large. On the other hand, there are those who denigrade its value by stressing the relatively high per pupil cost of vocational instruction. The Kaufman cost-benefit study, the preliminary stage of which is reported here, sheds light on the fundamental question: Are the benefits of vocational education worth the costs? This is one of the most significant studies of the year, certainly one that should be well known by all with leadership responsibilities in vocational education.

The twofold objectives of the project were to develop a broad methodology on which to conduct an empirical study of the costs and benefits of vocational education; and second, to conduct the study on the basis of which conclusions can be drawn about

the efficiency of vocational education.

It is stated that this report was prepared primarily to assist the U. S. Office of Education in a preliminary evaluation of vocational education for its report to Congress. "A final report, due Oct. 1, 1968, will more fully explore the methodological issues, will contain more and refined data on benefits and costs, and will contain more extensive analysis of the data. In addition, consideration will be given to the 'inputs' and 'outputs' of school dropouts, an area which has virtually been unexplored."

The major steps taken in the development of this project include: an exploration of the theory of public expenditures for education; consideration of special problems in cost-benefit and cost-effectiveness analysis; description and statistical analysis of data, and the presentation of conclusions and implications.

Citing the position that education has its economic as well as cultural and social value, the study examines the complex conceptual problems associated with the analysis of cost effectiveness. Benefits of education, the report states, accrue not only to an individual, but also to the local community and society in terms of increased tax revenues, lowered welfare and protection expenses, and generally greater population stability.

Obtaining data from two cities, each having both vocational and academic high schools, analyses were made in which the educational costs and benefits of each type of school were compared. The two main indices of benefit were graduates' money earnings and the percentage of time they were employed. Costs data were obtained from published cross-section records for the two city school districts that were under investigation.

It was stated that cost-benefit analysis was first developed for public investment projects. "Economists have attempted to apply this evaluation technique to problems in education without looking into the distinctive nature of education. Because of this, until enormous efforts are made to refine the conceptual and measurement problems in costs and benefits of education, analysis of only limited meaning can result. . . ."

Speaking further on the problems inherent in applying cost-benefit analysis to education, the report, in its conclusions, has these statements:

—The application of cost-effectiveness or cost-benefit analysis is less valid for those public investments or expenditures occurring directly on the human agent than it is for public investments in goods, such as dams or highways.

—Before cost-effectiveness and cost-benefit analysis can be used effectively, considerable refinement must be done with respect to the relationship between economic concepts and theory and the institutional (e.g., human, political and social patterns of behavior) framework surrounding education.

The implications of the study assert that vocational-technical education does indeed have a payoff in terms of earnings and employment, when compared with other curricula, "recognizing at the same time the methodological and statistical limitations which have been discussed in this report." Kaufman's main concern, one which is shared by a great many vocational educators, is that only a limited segment of the population has received vocational instruction.

"There is evidence that vocational-technical education has not penetrated the student body, limiting its enrollment to a small percentage of students who not only must meet certain ability and aptitude requirements, but also are confronted with the teaching of related subjects in the more traditional manner. To a large number of students in both the academic and vocational curricula the requirements are too rigid and the courses are not relevant to their needs."

### Returns of Technical Education

8:13 "COSTS AND RETURNS OF TECHNICAL EDUCATION: A PILOT STUDY" BY ADGER B. CARROLL AND LOREN A. IHNEN. NORTH CAROLINA STATE UNIVERSITY, RALEIGH, N. C. 1966. (VT # 000-972) (U.S. DEPT. OF LABOR STUDY) 59 PAGES.

This study was conducted for the purpose of measuring costs and returns of human capital created by investments in two years of post-secondary technical education.

Data were obtained from a group of 45 high school graduates and 45 graduates of Gaston Technical Institute, Gastonia, N.C. High school and Gaston Tech graduates were selected in pairs, so that members of each pair were classmates who had similar records in high school.

Graduates were not included in the study if they had formal post-high school education or training other than at Gaston Tech, had permanent disabilities affecting employability, or had migrated more than 200 miles from their home community. Self-employed persons and those in military service were also excluded.

The estimated average cost to society for the two years of post-high school technical education was $7,425 per student. The estimated monetary value of productivity lost while students were obtaining technical education averaged $5,197, or 70 percent of the total. The remaining $2,228 was for costs of providing the educational program.

Monetary returns on investments in technical education began to accrue to Gaston Tech graduates during the first year after graduation. The average annual income from investment in technical education increased from $553 in the first year after schooling to $1,036 in the fourth post-graduate year. Total return per student for the first four years after graduation came to 65 percent of the average private investment.

"The estimated social rate of return on investments in technical education was 16.5 percent and the private rate, 22 percent, assuming that per capita real earnings would increase over time at a rate of 2 percent per annum. . . . Apparently the technical education obtained by the Gaston Tech graduates pays a high rate of return even if only the direct pecuniary returns are considered. If the indirect and nonmonetary returns could have been evaluated accurately, the social and private rates of return probably would have been much higher."

Calling attention to the limited scope of the study, the report states that its results should not be used for making generalizations about the

economic effectiveness of post-secondary technical education.

Three results of the investigation are reported:

1. The study represents a relatively intensive effort to determine the effect of education upon income, not of the effects of other variables often associated with investment in education, by using matched pairs of high school and Gaston Tech graduates plus regression analysis. The size and significance of the regression coefficients are indicative of the importance of standardizing for the income efforts of other variables associated with investments in education.

2. Fringe benefits should be taken into account in estimating the returns to investment in education.

3. The study is another piece of evidence which supports previous findings of high rates of return on investments in education.

## TOPIC THREE: State Administration of Vocational-Technical Education

### State Leadership Training

8:14 "A STATE PROGRAM FOR THE DEVELOPMENT OF PERSONS FOR LEADERSHIP ROLES IN THE ADMINISTRATION OF LOCAL PROGRAMS OF VOCATIONAL AND TECHNICAL EDUCATION" BY RALPH C. WENRICH. UNIVERSITY OF MICHIGAN, ANN ARBOR, MICH. (PROJECT # 5-0150) 1966. ERIC # ED 010 124. MF $0.50 HC $2.48. 62 PAGES.

The University of Michigan project for the training of persons for roles of leadership had five objectives:

1. To further refine the leadership development programs operated in the years 1964-65 and 1965-66.

2. To validate some of the criteria used in the screening and selection of applicants for the program.

3. To make an extensive follow-up study of the 40 participants involved in the original experimentation project of 1964-65.

4. To prepare additional persons for leadership roles.

5. To make information available to other states in regard to methods employed and the results achieved through the leadership development program.

The leadership training program reported is the third in a series of similar projects. The full program was divided into four procedural phases: the identification of persons in vocational and technical education considered to have high leadership potential; the recruitment and selection of the 20 outstanding candidates; the participation of selected trainees in an eight-week summer workshop, and participation in an internship program during the following school year.

In order to identify persons in vocational and technical education with high leadership potential, 1,124 nomination forms were mailed to local school and college administrators and teacher trainers. As a result, 278 names were received. Members of this group were then sent letters informing them of their nomination. They were asked to declare their candidacy by completing and returning personal data questionnaires. Completed applications were filed by 146 nominees.

The number of candidates was reduced to 47 by using such selective criteria as educational background, work experience, teaching experience in vocational education, age, position of leadership held, and admissibility to graduate studies. Final selections were made on the bases of personal interviews and three standardized tests: the Edwards Personal Preference Test, the American Council on Education Psychological Examination, and the Public Opinion Questionnaire.

The eight-week summer program consisted of formal presentations, field trips, seminars, and discussions. Approximately 80 hours were allocated to each of the three sections. Each trainee received a Carnegie Corporation scholarship of $600 for participation in the summer program.

The internship phase of the leadership training program involved enrollment in a university seminar which met once each month at Ann Arbor, and participation in one or more projects under the direction of a local school administrator. Activities included: making a community occupational survey; studying school administrative organization, and conducting a study of existing vocational programs in the community.

It was reported that interns did not need time off from their regular teaching assignment or other employment. However, interns who could arrange for released time were to be offered desirable additional experiences in leadership roles.

This report is valuable mainly for its complete appendix, which documents the various steps taken to recruit and select candidates and develop an instructional program. An outline of typical intern activities is also contained in the appendix.

Classifying enrollment in a university seminar and participation in one or more part-time projects as internship appears to be an extremely liberal interpretation of the term. If internship is to be a significant phase of leadership training, it must be designed to provide for experience of such duration and intensity that important changes in knowledge and insight into administrative matters will accrue.

### Instruments To Study Agencies

8:15 "IDENTIFICATION AND DEVELOPMENT OF INSTRUMENTS FOR A STUDY OF THE EXPECTATIONS AND PERCEPTIONS OF THE STATE VOCATIONAL-TECHNICAL EDUCATION AGENCIES AND THEIR INFLUENCE UPON LOCAL PROGRAMS" BY ALLEN LEE. UNIVERSITY OF CALIFORNIA, BERKELEY, CALIF. (PROJECT # 5-8466) 1967. (VT # 002-614) 76 PAGES.

How influential is state leadership in framing the tone and pattern of the statewide vocational program? Are state divisions of vocational-technical education "change agents" in the sense that they provide the inspiration and impetus for local innovation, or are they mainly concerned with regulatory responsibilities?

Although there is constant conjecture about the role and function of state vocational departments, the amount of scientific analysis about the subject has been negligible. It is for this reason that the University of California program to develop instruments and study state vocational-technical agencies is of special significance.

The purpose of the study was to make a thorough review of literature and accomplish some identification,

development and testing of instruments designed to facilitate a subsequent major investigation of state leadership in vocational education.

The specific objectives of this research effort were:

—To identify, design and develop preliminary drafts of instruments to ascertain the expectations and perceptions of the role of state vocational and technical education agencies.

—To field test preliminary drafts of the instruments in five or more states.

—To make some refinement of the initial drafts of these instruments based upon pragmatic experience.

—To produce instruments in acceptable form and present them to the U.S. Office of Education for approval as required by the Federal Reports Act of 1942.

—To determine an acceptable and/or preferable format of steps and procedures for applying the instruments.

It was reported that the central focus of this project was to locate, adapt or design instruments appropriate for measuring the expectations and conceptual ideals of the roles of state vocational-technical agencies. The review of literature revealed no existing instruments which met the need. Hence, the research effort concentrated on the design and development of a suitable instrument.

The procedures followed in the development of the instrument involved 16 steps, several of which were taken concurrently. These steps included the formulation of hypotheses, review of literature, development of an item pool, application of criteria for selecting items, planning forms of analysis, and instruments construction, field testing and revision.

Consultants such as chief state school officers, state directors of vocational education, university professors and researchers, community college and local school personnel, economics and management analysts, provided advice on various parts of the instrument.

Items which survived the process of critique and refinement were sorted into these categories: (a) those which were pertinent to the "change process"—setting goals, defining problems, research, program development, and (b) those related to inspection, compliance checking, maintaining minimum standards and regulation.

Initial responses to the instrument tended to support the basic assumption underlying its development. That is, there is a taxonomy of educational leadership and change which can be defined and delineated as: (a) setting goals; (b) defining problems; (c) research; (d) program development; (e) field testing; (f) dissemination, and (g) practice. State education agency activities circumscribed by these seven categories were classified as leadership activities. The others were categorized as regulation and inspection activities.

Included in the project report is the instrument developed, "Group Interview Guide for a National Study of the Administration of Vocational-Technical Education at the State Level." This seven-step guide is designed to ascertain perceptions, opinions and suggestions, as well as personal data needed to identify the status of respondents. It should be useful to students of administrative processes at any level.

The nationwide investigation, planned to be the next step, will surely provide some significant revelations concerning state leadership for vocational education. Information thus obtained would be beneficial to all state departments as well as federal agencies. Common problems, whether in administrative organization or operating procedures, would thus be more clearly delineated. Also, the more exemplary patterns of state leadership, when better known to others, may help to raise the national quality of vocational education.

## Criteria for Self-Analysis

8:16 "FORMAT AND CRITERIA FOR SELF-ANALYSIS FOR VOCATIONAL-TECHNICAL EDUCATION" (INTERIM REPORT) BY ALLEN LEE. UNIVERSITY OF CALIFORNIA, BERKELEY, CALIF. (PROJECT # 6-2921) 1967. (VT # 003-249) 92 PAGES.

This project is one part of a national study of state-level administration of vocational-technical education. The rationale for having such a national study may be found in the introductory statements: "A good example of the need for change and improvement in state governments today is the current status of public education organizations, which have more often than not just grown 'like Topsy'. Throughout the 50 states, one can observe a hodgepodge of arrangements, influenced by a variety of vested interests and moving with some lack of coordination."

And: "In recent years, there has been a nationwide concern about the respective roles of state and federal agencies; the fragmentation of responsibility for education on both state and federal levels . . . and the need for change and improvement in state education leadership."

The development of criteria for self-analysis of state agencies, it is said, is intended primarily to be a service to these agencies. It is further stated that there are inherent differences among the states; therefore, no one pattern or set of criteria will ever be appropriate for all.

A strong influence in the development of format and criteria for self-analysis has been the National Association of State Directors of Vocational Education. A 14-man committee of this organization together with a number of persons from general education; Freeman Holmer, an outstanding management analyst; and representatives of other disciplines met in a three-day workshop to prepare raw materials for the project.

A six-member staff gave assistance to the principal investigator. Specific tasks performed were the interpretation of committee recommendations, and the development of a format and criteria based on a national and forward-looking, rather than a state, regional or status quo orientation. It is reported that ideas were borrowed and adapted from the National Committee for the Accreditation of Teacher Education, Evaluative Criteria for Secondary Schools, and the Western Association of Schools and Colleges.

The bulk of this report, taking up 87 pages, is the *Instructions, Symbols and Suggested Criteria for Self-Analyses of the State Vocational Education Agency*. The main subdivisions of the Self-Analysis are: Philosophy and Objectives; The State Board and its Legal Basis; Organizational Structure of the Agency; Individual Program Areas, and Administrative Functions.

Another portion of the report contains a series of definitions under the

title: "Terminology Embodied in a Concept of Occupational Education." Of special interest here is a definition of "occupational education," a term which has certainly had some loose and varied interpretations of late.

*Occupational education*: Education designed to contribute to occupational choice, competence and advancement.

a. *Professional education:* Specialized education for occupations requiring four or more years of college preparation.

b. *Practical arts education:* Education in agriculture, business, distribution, home economics, industry, and similar fields which is not designed to prepare for a particular occupation or a cluster of related occupations.

c. *Technical education:* Specialized education for occupations ordinarily requiring two or more years of preparation beyond the high school which emphasizes the science, mathematics and laboratory procedures related to the occupations for which the students are preparing.

d. *Vocational education:* Specialized education for a particular nonprofessional occupation or a cluster of these occupations.

## TOPIC FOUR: Studies of General Interest to Administrators

### Fiscal Relations

8:17 "VOCATIONAL EDUCATION AND INTERGOVERNMENTAL FISCAL RELATIONS IN THE POSTWAR PERIOD" BY BRUCE F. DAVIE. GEORGETOWN UNIVERSITY, WASHINGTON, D.C. (PROJECT # 5-0185) 1966. ERIC # ED 010 642. MF $0.50 HC $5.00. 125 PAGES.

How effectively have the purposes of federal aid to vocational education laws been realized? In the light of research, can allotment systems to the states be improved? Has federal aid stimulated state-local expenditures for vocational education? These are the major concerns of the economic analysis of intergovernmental fiscal relations.

The study calls attention to two problems inherent in a federal structure of government. One is the conflict between the desire to meet national objectives and the commitment to maintain a system of decentralized authority. The other is the divergence between local need and local fiscal capacity.

"Often national needs are not simply the sum of state-local needs. Voters and their representatives at the local level may not see the need for programs, the benefits of which accrue largely outside the boundaries of their locality. In many cases, the benefits of vocational education are of this nature."

When speaking of the means for apportioning federal funds among states and localities, several alternatives are given:

—Federal funds may be used for direct support to particular projects—as is the case with Title III, E.S.E.A. of 1965.

—Federal payments may be apportioned to states and localities by fixed dollar amounts—E.S.E.A., Title I.

—A fixed federal appropriation among states may be divided, based on: (a) state expenditures, (b) some quantitative measure of the program's extent, such as pupil enrollment, or (c) potential demand for the program (e.g., population in a particular age group).

"Federal and state monies for vocational education are often distributed by the states to local school districts on the basis of either expenditures or enrollments. Whatever means are used to apportion funds among states or localities, the allotments so determined can be adjusted to reflect relative state and local fiscal capacity. The Vocational Education Act of 1963 provides for such an adjustment."

The Smith-Hughes Act is given as an example of legislation which imposes conditions on local governments which receive grants-in-aid. These are the well-known matching requirements, and the submission of a state plan which provides for a number of qualitative aspects of the program.

The study traces the intergovernmental fiscal relations of the Smith-Hughes and George-Barden Acts during the 1947-1964 period to determine the way in which federal appropriations for these two acts were allotted among the states. The two basic methods by which states allot funds to local areas were also analyzed. Major concern is given to the fiscal response of states to federal funds earmarked for vocational education. The states of Maryland, Pennsylvania, Virginia, and West Virginia are used as examples.

Also examined are the technical education programs initiated in 1959 under Title III of the George-Barden Act.

The conclusions of the study are made in relation to two basic questions: "Can the procedures used to allot federal vocational education funds among the states be improved?" And: "Has federal aid stimulated state-local expenditures for vocational education?"

In response to the first question, the study states that despite the improvements introduced by the Vocational Education Act of 1963, significant changes in allotment procedures can be made which would better meet national education objectives.

"A major innovation of the 1963 Act was the inclusion of an equalization provision in the allotment procedures. Only about 6 percent of the 1966 appropriation was in effect shifted from rich to poor states by applying the equalization provision. As indicated in that section, the particular mathematical form of the formula used in the equalization provision could be improved so as to better reflect the intent of Congress.

"It was also argued that per capita personal income is a misleading measure of state fiscal capacity to use in such equalization formulas. In addition, matching ratios could be adjusted so that states which receive larger federal allotments because of their relatively low fiscal capacity would not be required to spend larger amounts of state-local funds."

The second question—"Has federal aid stimulated state-local expenditures for vocational education?"—received a qualified negative response.

"The study of the 1947-64 period indicated that no significant relationship existed between changes in federal expenditures for vocational education and changes in state-local expenditures: . . . Some states were in a good position to match federal funds as they already had such programs, and other states did not respond to any significant extent."

## Social Factors in Slums

8:18 "AN ANALYSIS AND INTERPRETATION OF DATA ON THE SOCIAL CHARACTERISTICS OF RESIDENTS OF "VINE CITY"—A NEGRO SLUM GHETTO WITHIN THE CITY OF ATLANTA, GEORGIA" BY MARCIA L. HALVORSEN, SPELMAN COLLEGE, ATLANTA, GA. (PROJECT # 6-8162) 1967. 61 PAGES.

The sociological study of "Vine City," a Negro section of Atlanta, was conducted to gain more perspective and understanding of the Southern urban Negro community. "Thus far, very little has been done in the way of controlled and objective study of the nature and problems of the Southern urban community whose populace is both Negro and poverty-stricken."

Primarily a statistical analysis with some interpretive material, the study was planned and conducted by the instructor and undergraduate sociology students at Spelman College in Atlanta.

The community studied, consisting of about 40 square blocks near the center of Atlanta, had 1,275 families living there. An arbitrary grid was placed over the complete area, dividing it into 10 interviewing sections. Structured interviews were conducted with 136 "Vine City" residents, or 11 percent of the family population. The questions asked centered around 11 areas of interest: family structure; housing; education; health; budget and spending; income; employment; political behavior and attitude toward authority; social activities, entertainment and recreation; deviant behavior patterns; and, finally, social class identification.

The study reveals that the median annual family income of those reporting was between $2,000 and $2,100. More than half of the respondents had family incomes of less than $3,000. Many of the people interviewed, over one-third of the group, did not appear to know, or remember, or care to say, what their incomes were.

The investigators found the patterns of employment and unemployment complicated and confusing. Many people had casual or sporadic work in a variety of jobs, and it was difficult to determine how they should be categorized for statistical purposes. It is suggested in the report that "underemployment" was a more characteristic description of workers' status.

The study's tabulation of specific occupations reveals that the great majority of workers were engaged in low-level service, unskilled and semi-skilled occupations. It was reported that the level of educational attainment could not be considered the prime deterrent to upward job mobility, as might be the case in Northern cities. Rather, discriminating practices severely restricted Negroes' job opportunities, regardless of qualifications.

Among the conclusions of this disturbing study is the statement that the Southern Negro is in no position to control or alter his destiny. "At the core of the problem is the fact that in all the major areas of life, the people are in a position of dependency. They have little control over what happens to them. They are not even asked, effectively, about solving their own problems. Outsiders tell them what is good for them and bad about them."

All of the 11 topics treated in the study should be sources of concern for the educator, regardless of his geographic location, for the seeds of hopelessness and apathy that have been generated in the "Vine City" of Atlanta are to be found in every state and region. This revealing investigation of the stunted fabric of life in a closed community, stated in stark statistical terms, gives poignant testimony to the great disparity between the mainstream of American life and those who exist in the subculture of ignorance, disease and poverty.

## Plant Site Location

8:19 "IMPLICATIONS OF VOCATIONAL EDUCATION FOR PLANT SITE LOCATION" BY ERNEST H. DEAN. UTAH TECHNICAL COLLEGE, PROVO, UTAH. (PROJECT # 6-8498) 1967. (VT # 003-386) 222 PAGES.

"Do industrialists consider the existence of vocational-technical facilities when they are determining plant site location?" This is the main question of the Utah Technical College study.

"For many years, vocational school people, community leaders, government officials and business organizations have maintained that the presence of a vocational-technical school in a community was an important factor considered by manufacturers as they looked for new plant sites."

The major hypothesis for this study is that claims and projections by businesses are based on limited observation, and in no instance upon investigative research to validate their contentions. A second hypothesis is that very little has been written, substantiated by research, upon vocational-technical education as a factor in manufacturing plant site location.

Sixteen research questions relating to the main problem of thi, study were stated:

1. Was vocational-technical education considered by manufacturers as a factor in their plant site selections?
2. Among the factors considered in the plant site selection process, where was vocational-technical education considered in rank of importance?
3. Were certain organizatons, including vocational school educators, looked to for assistance in the selection process?
4. Were public relations efforts, such as school information brochures, helpful in the selection process?
5. Did plant site selectors visit the vocational school facilities prior to selection of their sites?
6. Did plant site selectors secure a commitment from vocational-technical schools of their willingness and ability to train workers for the company?
7. Was preference placed upon kinds of schools conducting vocational education a factor in the selection process?
8. What was the importance placed upon levels of vocational education in the selection process?
9. What specific vocational courses are factors in the selection process?
10. What is the importance of certain factors, such as community attitude toward vocational education, which might enhance vocational-technical education as a factor in the selection process?
11. What is the importance of the proximity of the vocational school to the proposed plant site in the selection process?
12. What is the relative importance placed upon vocational-technical education as a factor in plant site selection, by various categories of the manufacturing industry?
13. Do companies of varying sizes assess vocational-technical education differently in the selection process?
14. Do companies locating plants in the states covered in this project assess vocational-technical education differently in the selection process?
15. What alternatives to vocational-technical education are factors in the selection process?

16. How do results of this study compare with other related studies?

The conclusions and recommendations of the study are based on five sources of information: the series of interviews, returned questionnaires, a *Fortune* survey of plant site selection factors, other related literature and a statistical analysis of the first three sources.

The study reveals that among the factors considered in plant site location, the supply of an adequate work force had first priority. This was followed, in order of importance, by transportation, available land and buildings, market, college and vocational education, and allied business relations.

Twenty-four other conclusions are reported. Among these is the finding that vocational education is a factor considered by the intermountain manufacturing industry, particularly clothing manufacturing, metal fabricating and electronic-electrical-refrigeration plants with large numbers of employees.

The Utah Technical College study is a thorough and comprehensive analysis of the methods employed and the factors considered by industrial management when making determinations about plant site location. The vocational-technical administrator will find this document a valuable source of information about policies and practices in various types of industry, which should help him more effectively communicate the benefits and resources of his own program to the industrial community.

## "PLAIN TALK"

IN PERIODS OF CHANGE, when new situations and problems cannot be readily satisfied by yesterday's remedies, the value of leadership, at every level of authority and realm of responsibility, becomes a major concern. Such is the case today; the number of capable administrators of vocational education is not sufficient to fill existing vacancies.

Yet the efforts to train vocational education leaders continue to be uncoordinated and sporadic, slow in adapting to changing conditions and demands. In terms of dollar investment, they are feeble indeed when compared with the management training expenditures being made by business and industry. It would seem fair to ask, therefore, why state and federal offices are not doing more to prepare vocational teachers for leadership positions.

In private enterprise, management training has become an important part of the overhead budget. Originally, the training of administrative personnel was devoted exclusively to operational matters, the techniques and practices closely associated with the business. Now, the typical training program not only has instruction in group dynamics and other behavioral studies, but there is also a new emphasis on the humanities, such as art, literature, and history.

There should be lessons for educators in this. If profit-making organizations are willing to invest thousands of dollars on an individual with leadership potential, they must be convinced that such an expenditure pays dividends. Leaders of business and industry must also beiieve that a more generalized interdisciplinary program has certain profitable benefits.

Although the studies reported in this issue do not effectively deal with the fundamental problem—the need for more extensive financial commitment to leadership recruitment and training—they are, as a whole, excellent. The reports treat topics related to the training and upgrading of leadership personnel, or they investigate problems that should have bearing on the administration of state or local programs of vocational-technical education.

Specifically, the studies include: three analyses of costs and benefits; a doctoral program in vocational education administration; an economic investigation of intergovernmental fiscal relations; an instrument for evaluating state administrative offices for vocational education; factors employed by industrial management in determining plant site location, and a sociological study of the living and working conditions in a southern, urban Negro slum.

### *Comparative Cost Study Is Significant*

Kaufman's analysis of comparative costs and benefits of vocational-technical education is especially important. Giving a thorough and comprehensive treatment to a controversial subject, the Kaufman study carefully delineates the research problems and inherent limitations associated with the measurement of human behavior and achievement. In economic terms, the study reveals that vocational education does indeed have a payoff in earnings and employment that should justify the additional instructional investment. Calling attention to the fact that vocational education has not penetrated the main ranks of the student body, it recommends that additional efforts are needed to insure that many more students become involved in some form of career-related instruction. It also proposes an open-ended curriculum, combining the objectives of gainful employment and continued education.

The Rutgers conference to consider a doctoral program in vocational education and administration presents the varied and often conflicting views of spokesmen from several academic disciplines and organizational settings.

Two practicing administrators of state and regional vocational programs stressed the value of specific knowledge and prior experience, recommending that each candidate for leadership training should have a background of payroll

employment and vocational teaching. Contending that the doctorate in vocational education administration should be a practitioner's, rather than a scholar's degree, the men placed heavy emphasis on tool subjects for administrative work that are based on careful job analysis. On the other hand, spokesmen for academic disciplines espoused the importance of the humanities.

In the extreme, either of these positions would be faulty. There can be no question that a doctor's degree should stand for more than mere proficiency in administrative practices. Equally inadequate would be the doctoral program in vocational administration that is all theory, one which neglects to fully appreciate the contribution of the professor who has run the school. What is needed, it would seem, is a balanced combination of theoretical concepts and practical applications. Expressed in personality terms, the ideal administrator of vocational education is a practical dreamer, one who never loses touch with the broad philosophical concepts affecting schools and people; while at the same time, he is able to balance the budget and make the buses run on time.

### *Story of "Vine City"*

The story of "Vine City," a Negro slum area in Atlanta, is based on an investigation conducted by undergraduate sociology students enrolled in Spelman College. Presented in statistical terms, the report is a stark testimonial of life in a closed society. Many residents of Vine City were subsisting within a perpetual cycle of poverty: malnutrition, disease, inadequate housing, and irregular employment were commonplace. Worst of all, the opportunities for residents to break out of their debility, regardless of personal initiative or ambition, were severely restricted. Education and job training for such persons would have little value in themselves. As long as restrictive employment practices limit the Negroes' access to better jobs, there is little incentive for educational achievement.

An important fringe benefit of the study was reported. This was realized by the college girls who conducted interviews and prepared statistical data. The report states that participation in the Vine City study was for many college students a rare source of insight and understanding.

### *New York State Story*

Probably the most ambitious program to train leadership manpower has been the three year effort in New York State. Here, something in the neighborhood of one million dollars was spent on 45 persons, teachers mainly, who were selected on the basis of educational qualifications and leadership potential. State and federal money was used to subsidize each trainee's salary throughout his year in the program, and for the expenses of travel and college instruction. A significant corollary to this exemplary new departure has been the corresponding breakthrough in new area vocational programs in the state.

Five years ago, New York State had less than 10 area vocational programs for high school students. Today, there are nearly 50, mainly in regions of the state where opportunities for vocational instruction had been severely limited in the past. Closely associated with this dramatic increase has been the intensive program of leadership training.

For a majority of the persons involved, the internship phase of the program was the actual development of a new area program in a new situation. Typical tasks performed included the preparation of five-year labor demand and curriculum projections; the recruitment and selection of staff; and the preparation of educational specifications: in fact, all of the details associated with getting a new school off the ground.

The benefits of this singular investment in management manpower can only be assessed in terms of the leadership contributions of its 45 graduates. So far, one year after the program's conclusion, this has been most impressive. At present, all but two are serving as directors or assistant directors, mainly in new area centers of technology of New York State. Only time will tell how effectively each leadership training graduate will perform, but they already have paid back a substantial return on the original investment.

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**TOPIC THREE: State Administration of Vocational-Technical Education**

8:14 "A State Program for the Development of Persons for Leadership Roles in the Administration of Local Programs of Vocational and Technical Education" by Wenrich, Ralph C. University of Michigan, Ann Arbor, Mich. (Project # 5-0150) 1966. ERIC # ED 010 124. MF $0.50 HC $2.48. 62 pages.

8:15 "Identification and Development of Instruments for a Study of the Expectations and Perceptions of the State Vocational-Technical Education Agencies and Their Influence Upon Local Programs" by Lee, Allen. University of California, Berkeley, Calif. (Project # 5-8466) 1967. (VT # 002-614) 76 pages.

8:16 "Format and Criteria for Self-Analysis for Vocational-Technical Education" (Interim Report) by Lee, Allen. University of California, Berkeley, Calif. (Project # 6-2921) 1967. (VT # 003-249) 92 pages.

**TOPIC FOUR: Studies of General Interest to Administrators**

8:17 "Vocational Education and Intergovernmental Fiscal Relations in the Postwar Period" by Davie, Bruce F. Georgetown University, Washington, D. C. (Project # 5-0185) 1966. ERIC # ED 010 642. MF $0.50 HC $5.00. 125 pages.

8:18 "An Analysis and Interpretation of Data on the Social Characteristics of Residents of 'Vine City'—A Negro Slum Ghetto within the City of Atlanta, Georgia" by Halvorsen, Marcia L. Spelman College, Atlanta, Ga. (Project # 6-8162) 1967. 61 pages.

8:19 "Implications of Vocational Education for Plant Site Location" by Dean, Ernest H. Utah Technical College, Provo, Utah. (Project # 6-8498) 1967. (VT # 003-386) 222 pages.

## Studies in Process

**TOPIC ONE: Leadership Training, Workshops and Institutes**

"Regional Conferences on Education, Training and Employment" by Bertolaet, Frederick. The Research Council of the Great Cities Program for School Improvement, Chicago, Ill. (Project # 5-0010).

"The Development of Material for the Orientation of School Administrators to Vocational Needs and Programs" by Hayes, Dale K. University of Nebraska, Lincoln, Neb. (Project # 5-0155).

"Vocational Education Leadership Training Program" by Lester, Herschel T. University of Georgia, Athens, Ga. (Project # 6-1403).

"National Leadership Development Institutes in Technical Education" by Miller, A. J. Ohio State University, Columbus, Ohio. (Project # 7-0452).

"Seminar for Supervisors and Teacher Educators for Persons with Special Needs" Lamar, Carl. University of Kentucky, Lexington, Ky. (Project # 7-0527).

"National Leadership Development Seminar for State Directors of Vocational Education" by Allen, Mary P. American Vocational Association, Washington, D.C. (Project # 7-0820).

"Development of a Programmed Course for Group Instruction of Secondary Teachers and Administrators in the Techniques of Instructional Technology" by Deterline, William A. Commerce Clearing House, Inc. Palo Alto, Calif. (Project # 7-1071).

**TOPIC TWO: No studies.**

**TOPIC THREE: No studies.**

**TOPIC FOUR: Studies of General Interest to Administrators**

"Search of Human Relations Area Files for Materials Relating to Selected Relationships in Social Systems" by Gibson, R. Oliver. State University of New York, Buffalo, N.Y. (Project # 7-8100).

## AVAILABILITY OF REPORTS FOR FURTHER STUDY

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